

## **SERIES 1000 CERTIFICATES**

### **1. SCOPE**

1.1 Section 106.05 of the Specifications stipulates that when required by the Standard Specifications or the Special Provisions, either a Certificate of Compliance or a Certificate of Analysis shall be furnished for certain materials or manufactured assemblies prior to their use. The Engineer may permit the use of these materials prior to, or without, sampling and testing if the appropriate certificate is provided. This permission is granted for these certain materials or manufactured assemblies because the Department either relies on the manufacturer's test results, accepts the material based on a manufacturing process that cannot be tested, suffers little risk by using the material prior to testing, or is unable to perform the tests. The Engineer reserves the right to revoke this permission for any cause, such as, the materials appear damaged, the materials continually fail Department testing, or any similar reason. Project personnel are expected to exercise good engineering judgement in evaluating the condition of material prior to its use. Section 106.05 of the Specifications states that materials or manufactured assemblies, for which a certificate is furnished, may be sampled and tested at any time. If the material is not in conformance with the requirements of the plans and specifications, it will be subject to rejection whether in place or not. Certificates shall comply with the requirements specified herein, and of the Specifications and applicable project Special Provisions.

1.2 Certificates may be prepared by either the manufacturer or the supplier of the material being certified. When material is certified by a supplier, he shall upon request provide documentation from the manufacturer indicating that the material meets the requirements of the Specifications. For purposes of certifying materials, a supplier is defined as an organization that on a routine basis maintains an inventory of the material in question for sale as a vendor or use as a contractor or subcontractor. A vendor, contractor, or subcontractor purchasing a supply of material on a one time basis for a particular project does not qualify as a supplier.

1.3 The contractor shall submit an original or copy of the certificate to the Engineer. The certificate shall be retained in the project file.

1.4 A certificate shall accompany each lot of material delivered to the project. If multiple deliveries of a lot are made to the project, the first shipment must be accompanied by a certificate. Subsequent deliveries shall be accompanied by either a copy of the certificate, or a shipping document that contains identification indicating that the material delivered is represented by the certificate.

1.5 The procedures specified herein and in Section 106.05 of the Specifications have been developed to assure compliance with the Specifications and to standardize certification procedures. Policy and Procedure Directives are issued by Materials Group for materials that require further explanation or have additions or deviations from the general requirements. Materials requiring a Certificate of Compliance or a Certificate of Analysis that are currently covered by Policy and Procedure Directives are:

1. Chemical and Air Entraining Admixtures for Portland Cement Concrete
2. Curing Compounds
3. Emulsified Bituminous Materials
4. Hydraulic Cement, Fly Ash, and Natural Pozzolan
5. Reinforcing Bars
6. Timber Guard Rail Posts and Blocks

1.6 An example of a typical Certificate of Compliance is given in Figure 1. Manufacturers or suppliers may use Department distributed certificate forms, as issued for some materials through Materials Group Policy and Procedure Directives, or they may use forms of their own choice or origin so long as all the requirements are met.

## **2. CERTIFICATE REQUIREMENTS**

2.1 A certificate of compliance shall contain the following information:

- (1) A description of the material supplied.
- (2) Quantity of material represented by the certificate.
- (3) Means of material identification, such as label, lot number, marking, etc.
- (4) Statement that the material complies in all respects with the specific requirements of the cited specifications. Certificates shall state compliance to the specific cited specification, such as, AASHTO M-194, ASTM A-588, etc.; or, specific table or subsection of the Arizona Department of Transportation Standard Specifications or Special Provisions; or, they may reference both.

(5) The name, title, and signature of a person having legal authority to bind the manufacturer or the supplier of the material. The date of the signature shall also be given. The name and address of the manufacturer or supplier of the material shall be shown on the certificate. A copy or facsimile reproduction (FAX) will be acceptable. However, the original certificate shall be made available upon request. The person signing the certificate shall be in one of the following categories:

- a. An officer of a corporation.
- b. A partner in a business partnership or an owner.
- c. A general manager.
- d. Any person having been given the authority in writing by one of the three listed above. The manufacturer or supplier may submit a list of those who are authorized to sign certificates. This list shall be submitted under the name, title, and signature of one of the first three listed above. This list will be kept on file for subsequent certificates received on that project.

2.2 Each of the first four items specified in section 2.1 above shall be completed prior to the signing and dating as defined in item five. No certificate will be accepted that has been altered, added to, or changed in any way after the authorized signature and date have been affixed to the original certificate. However, notations of a clarifying nature, such as project number, contractor, or quantity shipped are acceptable, provided the basic requirements of the certificate are not affected.

2.3 Specifications for Federal-Aid projects require that additional information be contained in the certification of cement and steel products. Certificates for cement are required to additionally identify whether the cement is foreign or domestic. Certificates for steel products are required to additionally certify that all manufacturing processes to produce steel products, and any application of a coating to iron or steel, occurred in the United States. For steel products, the project Special Provisions contain an exception to this requirement based on the quantity of a particular product being used.

2.4 A Certificate of Analysis shall include all the information required in a Certificate of Compliance and, in addition, shall include the results of all tests required by the Specifications.

2.5 Each certificate shall be checked for compliance to these requirements. If certificates are received which are deficient, the project should retain the certificate and return a copy to the contractor, notifying him in writing how the certificate is deficient. The material represented by a deficient certificate is unacceptable for use until an acceptable certificate is received.

### **3. MATERIALS CERTIFICATE LOG**

3.1 For each project, a Materials Certificate Log shall be kept. All materials which require a certificate, and documentation of certificates received, shall be listed.

3.2 The log shall include the description/identification of the material being certified, the type of certificate required (Certificate of Compliance or Certificate of Analysis), the date the certificate was received, the date the material was checked against the certificate to assure the material received is the material represented by the certificate, the name of the person making the inspection of the material/certificate, and whether or not the certificate is acceptable.

3.3 The log shall include a "Comments" area for any further explanation or clarification, such as action taken in handling deficient certificates. If the Engineer directs testing on any material received with a certificate, the identification of the sample by sample number, date sampled, etc. shall be noted in the comments area for reference to testing performed.

3.4 An example of a Materials Certificate Log that may be used is shown in Figure 2. Acceptable alternates, such as computer generated reports, may be used provided the required information is given.

3.5 At the completion of the project, the resident engineer shall sign and date the completed log. A copy of the Materials Certificate Log shall be attached to the Materials Sample Checklist which is submitted to the Regional Materials Engineer along with other materials related documents.

### **4. MATERIALS REQUIRING CERTIFICATES**

4.1 Figure 3 provides a listing of various items which require either a Certificate of Compliance or a Certificate of Analysis. It is not intended that this list address all items for which either a Certificate of Compliance or a Certificate of Analysis is required. The applicable Specifications and project Special Provisions will govern in determining the need for either a Certificate of Compliance or a Certificate of Analysis.

# ABC CHEMICAL COMPANY

1234 South XYZ Street  
Somewhere, Arizona 56789

## **E** CERTIFICATE OF COMPLIANCE **X**

This is to certify that the following material, manufactured and supplied by ABC Chemical Company, **A** complies in all respects with the requirements for "Chemical Admixtures for Concrete", AASHTO Designation M-194, for a Type F admixture (High Range Water Reducer) **M** as specified in Section 1006-2.04(C) of the Arizona Department of Transportation Standard Specifications.

Description of Material: WR008 (Water Reducing Agent) **P**  
Quantity: 1895 liters (500 Gallons)  
Lot Number: 1-4U-2C **L**

No halogens or chlorides are added to WR008 as functional ingredients during manufacture. **E**

*J.M. Boss 12-3-99*  
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J.M. Boss  
President

RST:uv

FIGURE 1

ARIZONA DEPARTMENT OF TRANSPORTATION  
**MATERIALS CERTIFICATE LOG**

PROJECT NO. \_\_\_\_\_ CONTRACTOR \_\_\_\_\_ SHEET \_\_\_\_\_ OF \_\_\_\_\_

[illegible]

RESIDENT ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
(Signature)

## FIGURE 2

CERTIFICATE OF COMPLIANCE	CERTIFICATE OF ANALYSIS
Asphalt-Rubber Materials	Asphalt Cement for Bituminous Mixes (prior to production)
Bituminous Materials	Emulsified Bituminous Materials (not preapproved)
Bank Protection Metal Items	Bearing Pads
Chain Link Cable Barrier	
Chain Link Fence Materials	
Concrete Admixtures	
Concrete and Metal Pipe	
Curing Compounds	
Damp Proofing, Water Proofing Materials	
Delinerators and Markers	
Fly Ash	Fly Ash
Geosynthetics/Geotextile Fabrics	Geosynthetics/Geotextile Fabrics (not preapproved)
Glass Beads	Glass Beads for Dual Component Pavement Markings
Guard Rail Materials	Guard Rail Anchor Bolts
Hydraulic Cement	Hydraulic Cement
Lime	Lime (when used as mineral admixture in asphaltic concrete mixtures)
Joint Materials	High Strength Bolts, Nuts, Washers, and Anchor Bolts
Paint	
Preformed Plastic Pavement Marking	
Prestressing and Post-Tensioning Steel	
Prismatic Reflectors	
Raised Pavement Markers	
Retroreflective Sheeting	
Reinforcing Steel	
Roadside Sign Supports	Breakaway Sign Posts
Seeding and Planting Materials	Steel Piling
Sign Panels and Related Materials	Structural Metals
Spillway, Downdrain, Inlet and Outlet Materials	Structural Steel
Thermoplastic Pavement Markings	Dual Component Pavement Markings
Traffic Controller Assembly	
Trees, Shrubs, and Plants	
Wire Fence Materials	

FIGURE 3